

PARTIAL TRANSLATION OF JAPANESE UNEXAMINED PATENT PUBLICATION  
(KOKAI) No. H08(1996)-266854

Title of the Invention: Apparatus for deodorant

Application No.: H07(1995)-76991

Filing Date: March 31, 1995

Inventors: Toshiyuki YAMAUCHI, and two others

Applicant: Matsushita Electric Works Ltd.

Publication Date: October 15, 1996

[Claims]

[Claim 1]

A deodorant apparatus comprising  
a discharging portion having a discharge electrode and a counter  
electrode which are capable of discharging by applying a high  
voltage, and  
a functional material capable of adsorbing and decomposing a  
gaseous component by means of at least one of ozone, heat, or  
ultraviolet radiation, which is generated by the discharge in  
said discharging portion.

\*\*\*\*\*

[0017]

As the functional material 4, a deodorizing and decomposing  
catalyst, that is, an ozone deodorizing catalyst, a combustive  
oxidation catalyst, or a photocatalyst, or an adsorbent, such  
as a porous ceramic, activated carbon, zeolite, or clay. The  
ozone deodorizing catalyst as the deodorizing and decomposing  
catalyst has a structure wherein a metallic oxide such as  
manganese dioxide, titanium oxide, or zinc oxide is carried on  
a substrate. ... The combustive oxidation catalyst has a  
structure wherein a metallic carrier of a metallic oxide such  
as platinum, palladium, or manganese dioxide is carried on a  
substrate. ... The photocatalyst has a structure wherein a  
metallic oxide having a photocatalytic function, such as  
titanium oxide, zinc oxide, or tin oxide and optionally a  
photosensitizer on mainly an inorganic substrate.

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[Brief Explanation of Drawings]

[Fig. 1]

A schematic sectional view of one embodiment.

[Fig. 2]

A schematic sectional view of another embodiment.

[Fig. 3]

A schematic sectional view of still another embodiment.

[Fig. 4]

A schematic sectional view of still another embodiment.

[Fig. 5]

A schematic sectional view of still another embodiment.

[Fig. 6]

A schematic sectional view of still another embodiment.

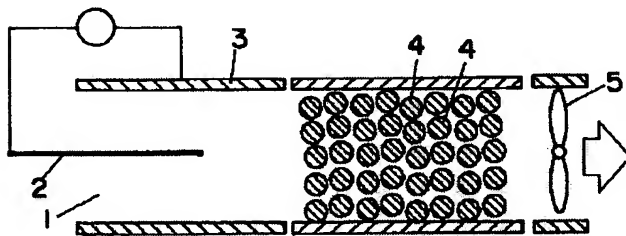
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#### [Explanation of Reference Numbers]

- 1 ... discharging portion;
- 2 ... discharge electrode;
- 3 ... counter electrode;
- 4 ... functional material.

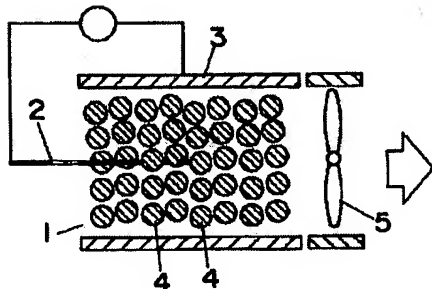
#### [Drawings]

[Fig. 1]



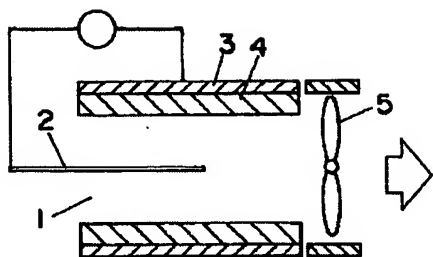
- 1 放電部
- 2 放電極
- 3 対極
- 4 機能材料

[Fig. 2]

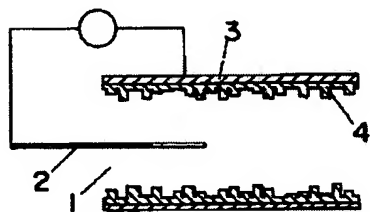


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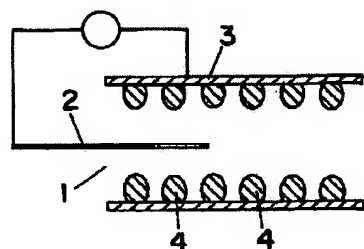
[Fig. 3]



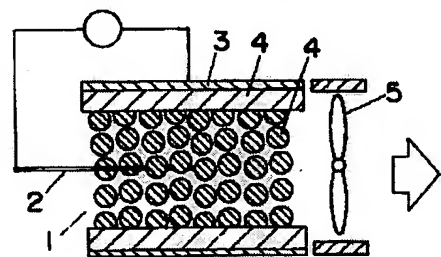
[Fig. 4]



[Fig. 5]



[Fig. 6]



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PARTIAL TRANSLATION OF JAPANESE UNEXAMINED PATENT PUBLICATION  
(KOKAI) No. 2001-159309

Title of the Invention: Apparatus of cleaning exhaust gas

Application No.: 11(1999)-343654

Filing Date: December 2, 1999

Inventors: Matsue UEDA, and two others

Applicant: Toyota Central Res. & Dev. Lab. Inc.

Publication Date: June 12, 2001

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[Brief Explanation of Drawings]

[Fig. 1]

A schematic view of one embodiment of the present apparatus of cleaning exhaust gas from an internal-combustion engine.

[Fig. 2]

A view showing one embodiment of concrete structures of the discharging apparatus 7.

[Fig. 3]

A sectional view of line X, X in Fig. 2.

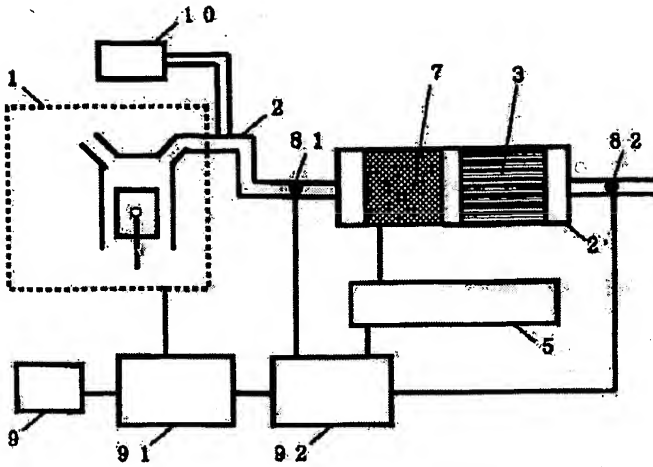
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[Explanation of Reference Numbers]

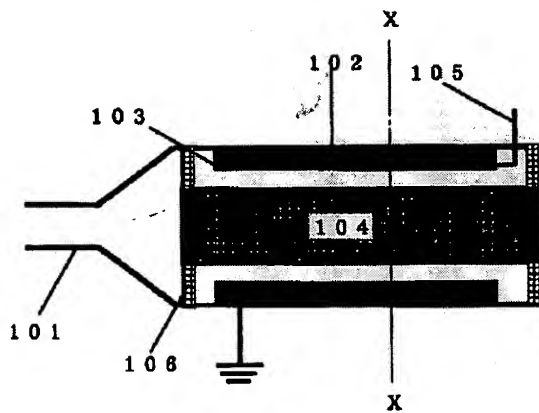
- 1 ... internal-combustion engine;
- 3 ... catalyst;
- 5 ... apparatus for generating pulse high voltage;
- 7 ... discharging apparatus;
- 81, 82 ... thermometer;
- 101 ... exhaust duct case;
- 102 ... insulating material;
- 103 ... electrode;
- 104 ... spacer;
- 105 ... plug;
- 106 ... glass.

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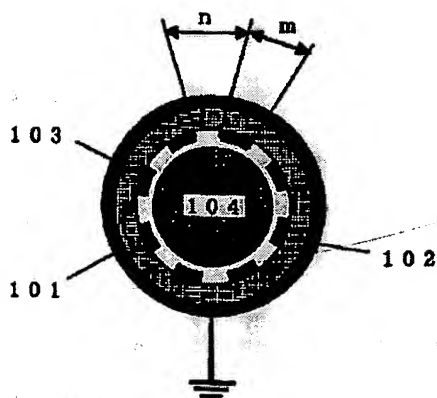
[Drawings]  
[Fig. 1]



[Fig. 2]



[Fig. 3]



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